

**EVALUATING A WEB-BASED COMPUTER PACKAGE
TO HELP TEACHERS USE
A SCIENCE-TECHNOLOGY-SOCIETY (STS) APPROACH
TO TEACHING HUMAN POPULATION DYNAMICS**

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ABSTRACT

Curriculum 2005, introduced into the South African education system in 1997, requires Natural Science teachers to use a learner-centred approach, to make lessons relevant to the learners' lives and experiences, to develop skills and to continuously assess activities. One educational approach, the Science-Technology-Society approach, can enable teachers to meet these demands. This approach uses social problems, issues and events which are science and technology related as the starting point of learning experiences and the learning context. Learners actively engage in activities by analysing the problems to find solutions.

The purpose of this study was to develop and formatively evaluate a Science-Technology-Society (STS) web-based package. This package was designed to help teachers use an STS approach to teaching human population dynamics. The evaluation research component was used to improve the package. Whilst developing the package, two experts (STS lecturer and an instructional designer) were consulted and they reviewed the package. The feedback obtained from the experts was used to improve the package. The prototype was then given to ten Natural Science teachers to review, who answered a questionnaire as they were using the package for the first time.

Responses from teachers and experts were collected and used to improve the package. There were changes regarding the instructions given in the package, language used, layout of text, structure of lessons and the purpose of the package. No changes were needed regarding the use of graphics, spreadsheet exercise and the teaching approach.

The majority of the teachers who commented on the package enjoyed using it. They felt it would be useful for teachers and supported the idea of developing the package further. These teachers were also interested in the potential of the STS approach for use in South African classrooms. Therefore, the researcher recommends that the package should further be improved so that teachers could use it in their teaching.

DECLARATION

I declare that this research report is my own, unaided work. It is being submitted in partial fulfilment of the degree of Master of Science at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Signature _____

Date _____

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